

KUL'BA, Fedor Yakovlevich; MIROMOV, Viktor Yevgen'yevich; SHUR,  
Ye.I., red.; ERLIKH, Ye.Ya., tekhn. red.

[Chemistry of thallium; complex compounds] Khimiia talliia;  
kompleksnye soedineniia. Leningrad, Goskhimizdat, 1963.  
206 p. (MIRA 16:12)

(Thallium compounds)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; TSUN TSZIN'-YAN [TS'ung Chin-yang]; FILIPPOVA, Z.G.

Electricity conductivity of some aminates of trivalent thallium in nitrobenzene solutions. Zhur.neorg.khim. 8 no.3:672-675 Mr '63.

(MIRA 16:4)

1. Leningradskiy tekhnologicheskii institut imeni L'ensoveta, kafedra obshchey khimii.

(Thallium compounds—Electric properties)  
(Nitrobenzene)

(Amines)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; SAZHINA, V.I.; OGIBENINA, T.G.

Compounds formed by trivalent thallium with pyridine and  
quinoline. Zhur.nacrg.khim. 8 no.4:911-915 Ap '63. (MIRA 16:3)  
(Thallium compounds) (Pyridine) (Quinoline)

MIRONOV, V.Ye.; KUL'BA, F.Ya.; NAZAROV, V.A.

Effect of outer-sphere cations on complex formation between  
cadmium and chlorine ions. Zhur.neorg.khim. 8 no.4:916-922  
Ap '63. (MIRA 16:3)

1. Leningradskiy tekhnologicheskii institut imeni Lensovetu,  
kafedra obshchey khimii.  
(Cadmium compounds) (Chlorine compounds) (Alkali metal compounds)

MIRONOV, V.Ye.; KUB'BA, F.Ya.; FEDOROV, V.A.

Effect of outer-sphere cations on the formation of nitrate complexes  
of lead (II). Zhur.neorg.khim. 8 no.5:1161-1164 My '63.

(MIRA 16:5)

(Lead compounds) (Cations)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; ANAN'YEVA, L.A.; ANDREYEVA, O.S.;  
ROZHANOVSKAYA, L.P.

Complex compounds of thallium triiodides with 1,10-phenanthroline. Zhur. neorg. khim. 8 no.6:1400-1401 Je '63.  
(MIRA 16:6)

1. Leningradskiy tekhnologicheskii institut imeni Leningra, kafedra obshchey khimii.

(Thallium compounds)

(Phenanthroline)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; TSUN TSZIN-YAN [TS'ung Chin-yang]

Compounds of trivalent thallium with 4,7-phenanthroline.  
Zhur. neorg. khim. 8 no.8:1846-1851 Ag '63. (MIRA 16:8)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta,  
kafedra obshchey khimii.  
(Thallium compounds) (Phenanthroline)

IRONOV, V.Ye.; KUL'BA, F.Ya.; FEDOROV, V.A.; NIKITENKO, T.F.

Potentiometric study of the chloride complexes of bismuth. Zhur.  
neorg. khim. 8 no.8:1852-1856 Ag. '63. (MIRA 16:8)

1. Leningradskiy tekhnologicheskii institut imeni Lensovetu,  
kafedra neorganicheskoy khimii.  
(Bismuth compounds) (Potentiometric analysis)



KUL'BA, F.Ya.; MIRNOV, V.Ye.; FEDOROV, V.A.; BAYEVSKIY, V.A.

Chloride complexes of univalent thallium. Zhur. neorg. khim.  
8 no.8:1945-1949 Ag. '63. (MIRA 16:8)

(Thallium compounds) (Chlorides)

MIRONOV, V.Ye.; KUL'BA, F.Ya.; TRIFONOV, O.I.

Effect of alkali metal cations on the formation of thiocyanate  
complexes of lead (II). Zhur.neorg.khim. 8 no.9:2113-2117 S  
'63. (MIRA 16:10)

1. Leningradskiy tekhnologicheskii institut imeni Lensovet, kafedra  
obshchey khimii.

KUL'BA, F.Ya.; MIRONOV, V.Ye.; ANAN'YEVA, L.A.

Complex compounds of monovalent thallium with 1,10-phenanthroline.  
Zhur. neorg. khim. 8 no.10:2326-2328 O '63. (MIRA 16:10)

1. Leningradskiy tekhnologicheskii institut im. Lensoveta.  
(Thallium compounds) (Phenanthroline)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; ANDREYEVA, O.S.

Complex compounds of thallium (III) with organic amines. Zhur.  
neorg. khim. 8, no.10:2323-2325 0 '63. (MIRA 16:10)

(Thallium compounds) (Amines)

MIRONOV, V.Ye.; KUL'BA, F.Ya.; FEDOROV, V.A.; NIKITENKO, T.F.

Effect of alkali metal cations on the formation of chloride  
complexes of bismuth. Zhur. neorg. khim. 8 no.10:2318-2322 0 '63.  
(MIRA 16:10)

1. Leningradskiy tekhnologicheskii institut, kafedra obshchey  
khimii.

(Alkali metals) (Bismuth compounds)

MIRONOV, V.Ye.; KUL'BA, F.Ya.; FEDOROV, V.A.; TIKHOMIROV, O.B.

Effect of the anionic background on the formation of bromide complexes of bivalent lead. Zhur, neorg. khim. 8 no.11:2524-2528 N '63.

Effect of the anionic background on the formation of chloride and nitrate complexes of lead (II). Ibid.:2536-2540

(MIRA 17:1)

1. Leningradskiy tekhnologicheskii institut imeni Lensovetu.

MIRONOV, V.Ye.; KUL'BA, F.Ye.; YAKOVLEV, Yu.B.

Diffusion potentials. Zhur. neorg. khim. 9 no. 3: 718-723  
Mr '64. (MIRA 17:3)

MIRONOV, V. Ye.; KUL'BA, F. Ya.; FEDOROV, V.A.

Effect of cations of alkaline and alkaline earth metals on  
complex formation in aqueous solutions. Zhur. neorg. khim.  
9 no.6:1487-1489 Je '63 (MIRA 17:8)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta,  
kafedra obshchey khimii.



MIRONOV, V.Ye.; KUL'BA, F.Ya.; FORINA, A.V.; GOLUBEVA, V.S.; NAZAROV, V.A.

Effect of the alkali metal cations on the formation of bromide  
complexes of cadmium. Zhur. neorg. khim. 9 no.9:2133-2137 S '64.  
(MJRA 17:11)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета,  
kafedra obshchey khimii.

MIROMOV, V.Ye.; KUL'BA, F.Ya.; FEDOROV, V.A.; FEDOROVA, A.V.

Chloride complexes of bivalent lead. Zhur. neorg. khim. 9 no.9:  
2138-2141 S '64. (MIRA 17:11)

1. Leningradskiy tekhnologicheskiy institut imeni Lensovetu,  
kafedra obshchey khimii.

KUL'BA, F.Ya.; MIRONOV, V.Ye.; ROZHANOVSKAYA, L.P.; SKURATOV, O.A.

Trivalent thallium bromide, iodide, and nitrate compounds  
with 3,3'-dipyridyl. Zhur. neorg. khim. 9 no.7:1630-1632  
Jl '64. (MIRA 17:9)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета,  
kafedra obshchey khimii.

MIRONOV, V.Ye.; KUL'BA, F.Ya.; IVANOV, Yu.Ye.

Complex compounds of zinc with alkali metal chlorides. Zhur.  
neorg. khim. 9 no.7:1633-1637 J1 '64. (MIRA 17:9)

1. Leningradskiy tekhnologicheskij institut imeni Lensoveta,  
kafedra obshchey khimii.

KUL'BA, P.Ye.; MIRONOV, V.Ye.; KOLYUSHENKOVA, G.N.

Behavior of bivalent lead in solutions containing iodine  
and bromine. Zhur. neorg. khim. 9 no.7:1638-1640 J1 '64.  
(MIRA 17:9)  
1. Leningradskiy tekhnologicheskij institut imeni Lenseveta,  
kafedra obshchey khimii.

MIRONOV, V.Ye.; KUL'BA, F.Ya.; FELOROV, V.A.

Effect of temperature on the formation of the chloride  
complexes of lead (II). Zhur. neorg. khim. 9 no.7:1641-  
1644 J1 '64. (MIRA 17:9)

1. Leningradskiy tekhnologicheskij institut imeni Lenaveta,  
kafedra obshchey khimii.

KUL'BA, F.Ya.; MINOMOV, V.Ye.; ZDERADICHKOVA, V.

Preparation of new aminates of trivalent thallium. Zhur. neorg.  
khim. 9 no.8:1876-1878 Ag '64.

(MIRA 17:11)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveteta,  
kafedra obshchey khimii.

KUL'BA, F. Ya.; YAKOVLEV, Yu.B.; MIRONOV, V. Ye.

Hydrolysis of trivalent thallium salts. Zhur. neorg. khim. 9  
no.11:2573-2577 N '64 (MIRA 18:1)



MIRONOV, V.Ye.; KUL'BA, F.Ya.; FEDOROV, V.A.

Chloride complexes of lead (II) and their reaction with alkali metal cations. Zhur.neorg.khim. 10 no.4:914-917 Ap '65.

(MIRA 18:6)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета,  
kafedra obshchey khimii.

KUL'BA, F.Ya.; MAKASHEV, Yu.A.

Reaction of trivalent thallium with nitrilotriacetic acid.  
Zhur. neorg. khim. 10 no.5:1172-1178 My '65. (MIRA 18:6)

1. Fiziko-tekhnicheskiy institut imeni Lofe AN SSSR i  
Leningradskiy tekhnologicheskii institut imeni Lensoveta.

MIRONOV, V.Ye.; KUL'BA, F.Ya.; PETROV, V.A.

Interaction of lead(II) chloride complexes with alkaline metal salts. Zhur. neorg. khim. 10 no.6:1388-1392 Je '65.

(MIRA 18:6)

1. Leningradskiy tekhnologicheskii institut imeni Iensoveta, kafedra obshchey khimii.

KUL'BA, F.Ya.; MIRONOV, V.Ye.; MRNYAKOVA, G.

Complex thiocyanates of univalent thallium. Zhur. neorg. khim.  
10 no.6:1393-1398 Je '65. (MIRA 18:6)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; MAVRIN, I.F.; YAKOVLEV, Yu.B.

Thermodynamics of the formation of univalent thallium associates.  
Zhur. neorg. khim. 10 no.9:2053-2056 S '65. (MIRA 18:10)

1. Leningradskiy tekhnologicheskij institut imeni Lensoveta, kafedra  
obshchey khimii.

KUL'BA, F.Ia.; MIRONOV, V.Ye.; MAVRIN, I.F.

Thermodynamics of thallous (III) chloride complexes. Zhur.fiz.khim.  
39 no.10:2595-2599 O '65. (MIRA 18:12)

1. Leningradskiy tekhnologicheskij institut imeni L'voveta.  
Submitted July 14, 1964.

KUL'BA, V., inzhener

Improved method of preparing sausages. Prom.koop. 13 no.5:12  
My '59. (MIRA 12:9)

1. Oblpromsovet, g.Bryansk.  
(Sausages)

KUL'BA, V., inzhener

The borders of shoe parts are bent by a machine. Prom.koop. 13  
no.6:23 Je '59. (MIRA 12:9)

1. Oblpromsovet g.Bryansk.  
(Bryansk--Shoe machinery)



SUSHCHENKO, G.P.; KUL'BA, V.S.

Organizing the canning and preserving in district food canneries.  
Kons.i ov.prom. 15 no.1:36 Ja '60. (MIRA 13:5)

1. Bryanskoye oblastnoye upravleniye promyshlennosti prodovol'-  
stvennykh tovarov.  
(Bryansk--Canning and preserving)

BARANOV, L.A.; KUL'BA, V.V.

Noncontact remote control system for traction sub-  
stations. Elek.i tepl. tiaga no.7:1-3 J1 '60.  
(MIRA 13:8)

1. Inzheneriy po teleupravleniyu 7-go uchastka  
energосnabzheniya.

(Electric railroads--Substations)  
(Remote control)

ALLIKAS, Leonid, kand. tekhn. nauk, dots.; KULBACH, Waldek, kand.  
tekhn. nauk, dots.; VAINO, E., inzh., retsenzent; MASSO, T.,  
red.; VAHTRE, I., tekhn. red.

[Wooden structures] Puitkonstruktsioonid. Tallinn, Eesti  
Riiklik Kirjastus, 1962. 414 p. (MIRA 15:11)  
(Building, Wooden)

KUL'BACHENKO

NEDASHKOVSKIY, V.F., dorozhnyy master; KUL'BACHENKO, A.M., dorozhnyy master;  
TEMIRBAYEV, B., dorozhnyy master; PRIYMAK, P.K., starshiy dorozhnyy  
master.

We approve the work system of the Kotov section. Put' 1 put. khoz.  
no. 5:22 My '57. (MLRA 10:6)

1. St. Brody L'vovskoy dorogi (for Nedashkovskiy). 2. St. Darg-  
Kokh Ordzhonikidzevskoy dorogi (for Kul'bachenko). 3. St. Am-  
karagay Karagandinskoy dorogi (for Temirbayev). 4. St. Amvrosi-  
yevka Donetskoy dorogi (for Priymak).

(Railroads--Maintenance and repair)

RUL'BACHINOKIY, N. (and others)

Bee Culture

Bee colonies with more than one queen. Pchelovodstvo 30, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

17(2, 10)

50V/16-59-9-33/47

AUTHOR: Lysenko, I.P., Tsymbal, A.M. and Kul'bachnaya, M.Z.

TITLE: On the Pathogenesis of Listerellosis. Author's Summary

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959,  
Nr 9, pp 127 (USSR)

ABSTRACT: The aim of the work was to study the connection between the development of experimental listerellosis in guinea pigs and the degree of disturbance of the body's barrier fixation function. It was found that, where this function was artificially disturbed, listerellosis developed in most (66.6%) of the animals. The other animals in this group were cleared of Listerella within 29 days. Where the barrier fixation function was not disturbed the infection did not, as a rule, evince or develop any clinical symptoms and the animals were free of Listerella within 29 days. If the barrier fixation function then was disturbed in this second group of animals 12 days after the start of the test, clinically pronounced listerellosis was provoked in some of the animals and in some of the others the period, during which Listerella were present in the body, was extended. The results suggest that

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On the Pathogenesis of Listerellosis. Author's Summary

SOV/16-59-9-33/47

the decisive role in the pathogenesis of listerellosis in susceptible, but not highly-sensitive, animals is the body's general power of resistance. A weakening of the resistance, particularly by disturbance of the barrier fixation function, can lead to the development of a clinically pronounced form of listerellosis.

ASSOCIATION: Ukrainskiy veterinarnyy institut (Ukrainian Veterinary Institute)

SUBMITTED: January 20, 1959

Card 2/2

FECHUK, I.M.; KUL'BAGHNYI, A.M.

Using hydraulic fracturing and jetting as protection against sudden coal and gas outbursts. Ugol' 35 no. 12:34-35 D '60.  
(MIRA 14:1)

1. Makayevskiy nauchno-issledovatel'skiy institut po bezopasnosti  
rabot v gornoy promyshlennosti.  
(Hydraulic mining) (Mine gases)



PECHUK, I.M.; KUL'BACHENYI, A.M.

First results of using hydraulic fracturing and washout to control sudden outbursts of coal and gas. Sbor. traid. Inst. gor. dela AN URSR no.13871-89 '63 (MIRA 1787)

PECHUK, I.M.; KUL'BACHNYI, A.N.

Hydraulic fracturing in the coal industry. Neft. khoz. 39 no.12:  
43-47 D '61. (MIRA 14:12)

(Donets Basin---Coal mines and mining)  
(Oil wells---Hydraulic fracturing)

KULBACHNY, I. G.

14

Metal Rolling Without Ingots [Direct Rolling from the Liquid State]. I. G. Kulbachny (*Teoria i Praktika Metallurgii* [Theory and Practice of Metallurgy], 1937, (3), 46-54).—[In Russian.] A review, dealing with the Hazelett process (Brit. Patent 421,530, Dec. 17, 1934), in which a furnace is tilted to supply a pool of molten metal between rolls.—N. A.

KUL'BACHNYY, I.G.

Mekhanicheskoye oforudovaniye prokatnyshhtsekhov Moscow, 1946. 863 p.  
Textbook for higher institutes dealing with mechanical

equipmetn, technological proceuses and structural characteristics used in rolling  
steel and construction and maintenance; published as a Govt. Scientific-Technical Edition.

3

*Kul'bachnyy, I.G.*

MOTKOVICH, Viktor; KUL'BACHNYI, I.G., doktor tekhnicheskikh nauk, nauchnyy  
redaktor; PÄKELIS, V.D., redaktor; OSTRIROV, H.S., tekhnicheskii  
redaktor

[Foundry men of Kolomna] Kolomenskie liteishchiki. Moskva, Vses.  
uchebno-pedagog. izd-vo Trudrezervizdat, 1956. 46 p. (MIRA 9:12)  
(Kolomna--Founding)

KUL'BACHNYY, O. I.

KUL'BACHNYY, O. I. --"Methods of Calculating Cam Mechanisms of the Inertia Type." Min Higher Education USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Sciences.)

So.: Knizhnaya Litopis', No. 7, 1956.

BARSOV, G.A., kand. ~~tekhn.~~ nauk, dots.; EEZMENOVA, L.V., kand. tekhn. nauk, ispolnyayushchiy obyazannosti dots.; GRODZENSKAYA, L.S., kand. tekhn. nauk; ZHELIGOVSKIY, A.V., kand. tekhn. nauk, dots.; KUVSHINNIKOV, G.A., kand. tekhn. nauk, dots.; KUL'BACHNYI, O.I., kand. tekhn. nauk, ispolnyayushchiy obyazannosti dots.; PANTELEYEV, S.I., kand. tekhn. nauk, dots.; SHEKHVITS, E.I., kand. tekhn. nauk, dots.; YUDENICH, V.V., kand. tekhn. nauk, dots.; NIKOLAYEVA, T.G., red.; GOROKHOVA, S.S., tekhn. red.

[Theory of flat mechanisms and the dynamics of machinery]  
Teoriia ploskikh mekhanizmov i dinamika mashin. [By] G.A.  
Barsov i dr. Moskva, Gos. izd-vo "Vysshaya shkola," 1961. 336 p.  
(MIRA 15:2)

(Mechanical movements) (Mechanical engineering)

ACCESSION NR: AR4040326

S/0124/64/000/004/A025/A025

SOURCE: Ref. zh. Mekhanika, Abs. 4A186

AUTHOR: Kul'bachnyy, O. I.; Pimenov, V. A.

TITLE: Geometric calculation of new cam gears with a flat cam and a spherical roller

CITED SOURCE: Sb. nauchn. tr. Vses. zaochn. mashinostroit. in-t, vyp. 4, 1963, 87-96

TOPIC TAGS: flat cam gear, spherical roller, continuous contact gear, toroid cam groove, pressure angle calculation

TRANSLATION: The authors discuss flat cam gears in which the driven element interacts with the cam through a spherical roller. The rotation axis of the roller is parallel to the direction of the driven element's motion in a gear with progressive movement of the latter, while in a gear with a reciprocating motion of the driven element it is perpendicular to the axis of the element's rotation. The cam is grooved and the surface of the groove is toroid. In contrast to standard grooved cams, the illustrated design is assumed to insure continuous contact between the roller and cam. The authors demonstrate a technique for determining the line of contact between the cam groove and the

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ACCESSION NR: AR4040326

spherical roller. A formula was developed for calculating pressure angles and a method is presented for defining the basic dimensions of cams and rollers from conditions relating to peak pressure angle limitation and lack of undercut in the effective cam profile. N. I. Levitskiy

SUB CODE: IE

ENCL: 00

Card 2/2

KUL'BACHNYY, O.I.; PIMENOV, V.A.

Geometrical investigation of new cam mechanisms. Teor. mash. i  
mekh. no.98/99:28-44 '64. (MIRA 17:9)

KULBACKA, M.

Certain properties of approximate derivatives. Bul  
Ac Pol mat 12 no. 1: 17-20 '64.

1. Chaire de Mathematique, Universite, Lodz. Presente par  
E. Marczewski.

KUL'BAKA, P.L., Geroy Sovetskogo Soyuza; RUDNIKOV, V.N., nauchnyy  
sotrudnik

Speed-up the construction of retting shops in hemp factories.  
Tekst.prom. 22 no.2:18-20 F '62. (MIRA 15:3)

1. Direktor Glukhovskogo pen'kozavoda (for Kul'baka).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut lubyanykh  
kul'tur (for Rudnikov).  
(Hemp industry)

L 19693-65 EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4 ASD(m)-3 HJH/JD

ACCESSION NR: AP4049463

S/0117/64/000/011/0029/0030

AUTHORS: Borisov, B. Ya.; Kul'baka, Yu. S.; Tsukur, A. K.

TITLE: Cutting of heated metals

SOURCE: Mashinostroitel', no. 11, 1964, 29-30

TOPIC TAGS: metal cutting, hot machining, grinding, hard metal/ G12L steel, G13L steel, T15K6 alloy

ABSTRACT: To decrease the mechanical strength and hardness and thus lower the required cutting power, the machining of heated metals was investigated. High manganese steels G12L and G13L were milled at 400-650C, using cutters made of T15K6 alloy. An electric induction heater was used to heat the metal before it reached the cutting tool. It was found that this method was 6-8 times faster than cold machining, required less cutting force, and gave a better finish than cold machining. Hard alloys containing iron carbides, tungsten, chromium, vanadium, and manganese were ground, using different types of grinding wheels. It was found that hot grinding of these alloys should be performed with corundum wheels at metal temperatures above 600C. Under these conditions the material removal is 20-30 times faster than during cold grinding, while the waste of abrasive decreases by a factor

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L 19693-65

ACCESSION NR: AP4049463

of 7-9. Orig. art. has: 2 figures.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozhye Machine  
Construction Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, MM

NO REF SOV: 000

OTHER: 000

Card 2/2

BORISOV, B.Ya., kand.tekhn.nauk, dotsent; KUL'BAKA, Yu.S., 19zh.

Mil<sup>14</sup> g heated built-up parts. Vest.mashinostr. 44 no. 2:  
79 F '64. (MIRA 17:7)

L 01000-66 ENT(d)/ENT(m)/EWP(c)/ENA(d)/EMP(v)/T/EMP(t)/EWF(k)/EWP(z)/EWP(b)/  
EWP(l)/ETC(m) MJW/JD/WW

ACCESSION NR: AP5018802

UR/6121/65/000/007/0026/0027  
621.914.1:669.15-194.56

AUTHOR: Borisov, B. Ya.; Kul'baka, Yu. S.

TITLE: Milling hot austenitic manganese steel

SOURCE: Stanki i instrument, no. 7, 1965, 26-27

TOPIC TAGS: manganese steel, steel milling, hot steel milling, cutting tool service life, machining efficiency /G13L steel, Hadfield steel

ABSTRACT: To determine the effect of heating on the machinability of G13L [AISI Hadfield] steel and the cutting tool durability, 60 x 50 x 200 mm specimens of cast G13L steel were milled with a single-point cutter fitted with a sintered TI5K6 [15% TiC, 6% Co, 79% W] insert blade. The steel was milled cold and then induction heated to a temperature of up to 650C. It was found that to obtain a cutter service life of 30--60 min, the workpiece temperature should be between 400 and 650C. At lower temperatures the cutter durability was low; at higher temperatures heat losses were excessive and structure transformations occurred in the G13L steel. The optimum cutting speed was within the limits of 140 to 180 m/min. In milling cold G13L steel at a speed of 25 m/sec, the cutter service life was 5 min; it increased to 40 min in mill-

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L 01000-66

ACCESSION NR: AP5018802

ing hot steel at a speed of 160 m/min. The machining efficiency, as a result of higher cutting speed and larger feed, increased 16 to 20 times. With heating, the milling of the G13L steel can be done at a depth of cut of over 10 mm. Hot G13L steel also was successfully milled with a cutter fitted with a sintered TsM-332 ceramic insert blade. At a cutting speed of 550 m/min and a heating temperature of 650C, the service life of the cutter was 30 min. Orig. art. has: 3 figures. [MS]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 001

ATD PRESS: 4069

Card 2/2

KUL'BASH, A. A.

Cand Tech Sci

"Investigation of the Process of Machining  
Steel Parts with Hard Alloys on the Automatic  
Forming Lathes."

16/5/50

Moscow Mechanical Inst

SO Vecheryaya Moskva  
Sum 71

112-57-7-14751

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 140 (USSR)

AUTHOR: Miloserdin, Yu. V., Kul'bakh, A. A., and Vinogradov, D. K.

TITLE: Outfit for Measuring Shock and Dynamic Loads

(Ustanovka dlya izmereniya udarnykh i dinamicheskikh nagruzok)

PERIODICAL: Sb. statey Vses. zaach. politekh. in-ta (Collection of Articles of the All-Union Correspondence Polytechnic Institute), 1956, Nr 13, pp 19-25

ABSTRACT: A method of measuring the quickly alternating and shock loads that act on two rotating, contacting disks is described. The shock load, with an estimated amplitude of 1,000 kg and a frequency of  $16 \frac{2}{3}$  cps, is created by a hydropneumatic device and is applied to a moving holder whose shaft carries one of the disks, mounted on bearings. The degree of shaft sag is measured by a transformer-type inductive pickup. An electronic circuit is described that comprises an oscillator, an amplifier with a phase-sensitive detector, and an output stage of a balanced DC amplifier. The inductive pickups were statically calibrated in a 0-300-kg range by means of both an output milliammeter and an

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112-57-7-14751

Outfit for Measuring Shock and Dynamic Loads

oscillograph. Methods of measuring dynamic loads are described, and it is pointed out that the amplitude measured by the above outfit is considerably smaller than that calculated on the assumption that transients are negligible.

E. A. G.

Card 2/2

SOV/117-59-8-35/44

AUTHORS: Fonarev, S.F., Candidate of Technical Sciences; Kul'-bakh, A.A., Candidate of Technical Sciences; Dzhonson, V.A., Engineer

TITLE: The Antifriction Properties of Material on Graphite Base

PERIODICAL: Mashinostroitel', 1959, Nr 8, pp 41-42 (USSR)

ABSTRACT: The article contains general information on the existing non-metal bearing materials requiring no lubrication (plastics and high polymers), and "15E", an artificial graphite matter obtained (in the USSR) by baking powder materials in 2,500 to 2,700°C. Detailed information on a new bearing material developed from the "15E" is also given. It was tested on a standard "MI" test machine, at the Institut mashinovedeniya AN SSSR (Machine Science Institute of the AS USSR) and the Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering-Physical Institute). The process of impregnating gra-

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SOV/117-59-8-35/44

The Antifriction Properties of Material on Graphite Base

phite materials with metals was developed in the USSR by G.K. Bannikov, V.D. Belogorskiy, I.V. Levin and I.I. Sigarev. Tests proved that impregnation of the "15E" with lead drastically improved the antifriction property of the bearings, and a pair of bearings of lead-impregnated material can be used for stainless steel shafts under pressure conditions of up to 400 kg/cm<sup>2</sup> (the friction factor under these conditions did not exceed 0.06). The maximum friction factor was below 0.25, and the wear on the tested bearings remained practically constant, and not over 0.6 to 0.7 mg/cm<sup>2</sup> per hour. The proper use is for pressure higher than 30 kg/cm<sup>2</sup>, and the correct running-in pressure for the bearings is 15 to 20 kg/cm<sup>2</sup>. There are 3 graphs.

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45247  
S/756/61/000/001/001/004

18.8200

AUTHORS: Fonarev, S. F., Kul'bakh, A. A., Dzhonson, V. A.

TITLE: On the investigation of the antifriction properties of stainless steel in unlubricated operation.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metody ispytaniy detaley i materialov mashin i priborov. no.1, 1960, 5-16.

TEXT: The MIFI (Moscow Engineering-Physics Institute) has investigated experimentally the behavior of sliding pairs of stainless steel (SS). The objective of the investigation is a better understanding of the frictional process in cylindrical hinge supports in structures in which organic greases and acid- and alkali-resistant lubricant materials cannot be employed. More specifically, the tests were made to determine the seizing pressure,  $q_{max}$ , and the friction coefficient (FC) as a function of the sliding speed. The specimens were in the form of cylindrical pins and fitted bushing sectors or pads made of 1X18H9T (1Kh18N9T) austenitic steel and the 3X13 (3Kh13) and X18 (Kh18) Cr steels. The specimens approximated the shape of bearings in which low-speed sliding occurs in conditions of boundary and dry friction. The pairs were washed with  $CCl_4$ . The inception of seizing is signaled by a sharp increase in frictional moment. Three sets of test.

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On the investigation of the antifriction properties ... S/756/61/000/001/001/004

were made: (a) Pairs of like composition; (b) pairs with a hard pin and a softer bushing pad; (c) pairs with a hard bushing pad and a softer pin. The tests results are summarized in one full-page and one two-page table. Seizing at  $v=0.06$  m/sec occurs even at low specific pressure ( $q = 2$  kg/cm<sup>2</sup>), but only several hours after the start of the test. The initial FC is low (0.2-0.22) and, if no seizing occurs, increases to a maximum after 15-25 min. The greater the pressure, the shorter the time required for seizure. At  $q = 1$  kg/cm<sup>2</sup> and  $v = 0.3$  m/sec, seizing occurs directly upon commencement of the motion. Thus, a 1Kh18N9T/1Kh18N9T contact without lubrication is not practicable for cylindrical supports. In the tests at  $v = 0.3$  m/sec it was found that at a certain value of the pressure a dark-brown layer or film begins to form, whereupon the FC almost doubles. No seizing occurs, and the layer, apparently, acts as a lubricant. Comparison of the test data obtained with SS and with C steel (CS), show that the SS is more prone to seizing than the CS ( $q_{max}/SS = 5$  kg/cm<sup>2</sup> against  $q_{max}/CS = 15-30$  kg/cm<sup>2</sup> at  $v = 0.3$  m/sec). The FC of the two nonhomogeneous pairs are about equal, but the wear of the hard part is smaller in the hard-pin, soft-bushing, pair. Tests with nonhomogeneous pairs at  $v = 0.06$  m/sec (results tabulated) manifested formation of a dark layer and no seizing, but an appreciable increase in surface roughness (profilographs "before" and "after" are shown). Tests with Kh18-steel rollers ( $H_{RC} > 50$ ) with a rolling

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On the investigation of the antifriction properties ... S/756/61/000/001/001/004

speed of 0.3 m/sec and a simultaneous sliding speed of 0.045 m/sec, evinced dark-layer formation only at pressures in excess of 80 kg per running cm of roller length. The formation of the dark layer or film is attributed to oxidizing wear at local temperatures of the order of 500-525°C. In summary, the use of unlubricated cylindrical support hinges of SS is severely limited to small loads and small sliding speeds. Of the pairs tested, optimal results were obtained with the Kh18 - Kh18 and 3Kh13 - 3Kh13 pairs. Pairs made of 1Kh18N9T are absolutely unsuitable for practical use. The formation of a dark layer increases the suitability of a SS pair. The initial surface finish is of little consequence, since the surface is roughened appreciably in use, even at low pressures. The friction coefficient attains 0.3-0.4 in dry friction without dark-layer formation, 0.55-0.7 in dry friction with dark-layer formation. The nature of the steels of the pair is inconsequential. Wide-angle bushings (which embrace more of the cylindrical pin) are not suitable for SS support hinges, since only a small area is actually carrying the load, at a pressure much in excess of the apparent mean value. Narrow-angle bushing pads, which sit on top of the pin and ensure a good contact, are more favorable. There are 4 figures, 3 tables, and 3 Russian-language Soviet references.

ASSOCIATION: None given.

Card 3/3

45248

S/756/61/000/001/002/004

11 9500  
AUTHORS: Fonarev, S. F., Kul'bakh, A. A., Dzhonson, V. A.

TITLE: Experimental investigation of the antifriction properties of carbon- and graphite-based materials operating in dry wear.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metody ispytaniy detaley i materialov mashin i priborov. no.1. 1961, 29-34.

TEXT: The objective of the investigation was the determination of the materials properties stated in the title, with especial reference to the exclusion of lubricated plain bearing or rolling-contact bearings in certain atomic-energy, jet-engine, high-speed automatic-machine, and chemical-machinery applications. The imperviousness and antifriction properties of carbon (C) and graphite (G) materials employed in unlubricated plain bearings for such applications are enhanced by their impregnation with liquid metals and alloys: Cu, Pb, bronze, babbitt, et al. (in the USSR such work has been done by G. K. Bannikov, V. D. Belogorskiy, I. V. Levin, and I. M. Sigarev). Such materials are used to form plain-bearing bushing for dry-wear operation. Tests of type-15D(D) and 15E (Ye) C-G materials were performed in the lab of the School of Machine and Tool Components of the MIFI (Moscow Engineering-Physics Institute). The wear resistance, temperature (T) behavior, friction coefficient (FC), and friction moment were determined as functions of the specific pressure (SP). The C-G material was shaped into a semicylindrical bushing which rested on a X18 (Kh18) steel journal 30 mm diam ( $H_{RC} = 54-56$ ). A Cr-Al thermocouple measured Card 1/2

Experimental investigation of the antifriction ...

S/756/61/000/001/002/004

the T at a depth of 0.2-0.3 mm from the friction surface within the highly heat-conductive C-G material. The graphitized material 15Ye without any impregnation operated satisfactorily at  $v = 0.3$  m/sec up to a SP of 20 kg/cm<sup>2</sup> (FC 0.27). These characteristics were measured after a 7-8-hr work-in period, when the mating surface had acquired a smooth, glossy finish. Pb impregnation of 15Ye material improves its antifriction properties significantly; paired with a Kh18 journal this material operates well at a SP up to 300 kg/cm<sup>2</sup> and speeds up to 0.7-0.8 m/sec, with a bushing wear of less than 0.66 mg/cm<sup>2</sup>.hr. The FC diminishes characteristically at an observed T of 140-150°C at which the plasticity of Pb increases sharply, thereby affording a measure of lubrication. The Pb impregnation becomes really effective at SP in excess of 30 kg/cm<sup>2</sup>. Preliminary working-in of the pair at SP of 15-20 kg/cm<sup>2</sup> is an indispensable requirement for satisfactory operation. The effect of Pb impregnation of 15D material is not comparably favorable. Wear increased appreciably at SP of 15 kg/cm<sup>2</sup>, with a further steep increase at 25 kg/cm<sup>2</sup>. The minimal FC is 0.35. The T grows monotonously and attain 280°C at SP 30 kg/cm<sup>2</sup>. At 140-150°C the wear increases sharply, the FC drops. Max operating SP is 15-18 kg/cm<sup>2</sup> at  $v = 0.3$  m/sec. There is no appreciable wear on the Kh18 journal with either type of C-G bushing. There are 5 figures; no tables or references.

ASSOCIATION: None given.

45249

S/756/61/000/001/003/004

11 2500  
AUTHORS: Fonarev, S. F., Kul'bakh, A. A., Dzhonson, V. A.

TITLE: Investigation of the antifriction properties of the graphite-based materials AG1500-B83 (AG1500-B83) and AG1500-Cu (AG1500-Cu) operating in dry wear.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metody ispytaniy detaley i materialov mashin i priborov. no.1. 1961, 35-46.

TEXT: Tests were made with the babbitt-impregnated AG1500-B83 and the Cu-impregnated AG1500-Cu graphite (G) materials developed by Moscow Electrode Plant. Photos of the microstructure (unetched) are shown. The babbitt permeates the pores of the parent material more fully than the Cu. The tests at the lab of the School for Machine and Tool Components of the MIFI (Moscow Engineering-Physics Institute) were made to determine the friction coefficient (FC) as a function of specific pressure (SP) at various sliding speeds (steady-state only), also the temperature (T) behavior and intensity of wear. The standard testing machine was modified to permit measurement of the friction moment, FC, and wear over a greater range of speeds and loads (exploded perspective view shown). The bushing-sector holder is spherically self-centering and is equipped for Cr-Al thermocouple T measurement 0.2-0.3 mm within the bushing sector. The journal is a 30-mm ODiam cylinder of X18 (Kh18) steel ( $H_R = 52-54$ ). Bushing and journal were worked in at  $35 \text{ kg/cm}^2$  and  $0.3 \text{ m/sec}$  until a  $R_C$  dark-brown glossy contact surface was developed (minimal time 1.5-2 Card 1/2

Investigation of the antifriction properties ...

S/756/61/000/001/003/004

hrs, actual time 4 hrs). The journal surface was not affected by the tests. Both babbit and Cu impregnation improved the antifriction properties of the G material. AG1500-B83 is less porous than AG1500-Cu, and its antifriction properties are more favorable. The FC of either material decreases with increasing SP and sliding speed. For example, at 0.3 m/sec and SP from 10-300 kg/cm<sup>2</sup>, the FC of AG1500-B83 decreases from 0.2 to 0.03. The speed effect is more marked than the SP effect. A boundary curve was determined for the SP and sliding speeds at which a temperature of 220°C and, hence, melting and seating of the babbit in AG1500-B83 was attained (typical values; SP 30 kg/cm<sup>2</sup>, v 2.25 m/sec; 70/15; 110/1.15; 150/0.9; 310/0.3). The wear of AG1500-B83 increases with speed, most sharply beyond 0.9 m/sec. Wear-in of AG1500-Cu specimens was difficult and required low SP (10-15 kg/cm<sup>2</sup>) and speeds (0.3-0.6 m/sec); the resulting contact surface was not homogeneous (comparative photos shown). The frictional behavior of AG1500-Cu is generally similar to that of AG1500-B83, but is less steady (data show broad scatter). With the passing of time, the Cu particles are lost, and the properties of the material approach those of unimpregnated graphite material. Improved impregnation technology may supply an answer to this problem. There are 11 figures and 1 Russian-language Soviet references (Yelin, L. V., Krylov, M. D., Vestnik metallopromyshlennosti, no.12, 1939, 33-39).

ASSOCIATION: None given.

Card 2/2

<sup>A</sup>  
KUL'BAKH, A., kand.tekhn.nauk; FONAREV, S., kand.tekhn.nauk; DZHONSON,  
V., Inzh.

Graphite becomes wear resistant. NTO 3 no.9:38-39 S '61.

(Graphite)

(MIRA 14:8)

S/756/62/000/002/001/004  
A004/A126

AUTHORS: Ponarev, S. F., Kul'bakh, A. A., Dzhonson, V. A.

TITLE: Antifriction material on the basis of graphite impregnated with polytetrafluoroethylene

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metody ispytaniy detaley mashin i priborov. no. 2. 1962, 3 - 9

TEXT: Based on tests carried out at the Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute) to improve the antifriction properties of graphitized material, a new antifriction graphitized material has been developed which is characterized by non-hygroscopicity and resistance to aggressive media. The basis of the new material is the grade АГ-1500 (AG-1500) graphitized material produced by the Moskovskiy elektrodnyy zavod (Moscow Electrode Plant), this material possessing the following technical characteristics: volumetric weight -  $1.73 \text{ g/cm}^3$ , porosity - 20.5%, compression strength -  $700 \text{ kg/cm}^2$ . This material was impregnated with a suspension of polytetrafluoroethylene (fluoroplastic) of the 4 Д(4D) grade. At peripheral sliding velocities in the range of

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Antifriction material on the basis of...

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A004/A126

from 0.3 to 0.9 m/sec, the new material resists a specific stress of 20 - 25 kg/cm<sup>2</sup>. The coefficient of sliding friction of the new material, operating under dry friction in pairs with a stainless X-18 (Kh-18) steel specimen, depends on the sliding velocity and the specific stress and varies in the range of from 0.24 to 0.34. Within the range of permissible operating conditions, the magnitude of specific wear of the new graphitized material does not exceed 3 - 3.5 mg/cm<sup>2</sup>·hour. There are 5 figures.

Card 2/2

FONAREV, S.F.; KUL'BAKH, A.A.; DZHONSON, V.A.

Unit for testing worm gears. Metod.isp.det.mash.1 prib. no.2:  
10-15 '62. (MIRA 16:4)

(Gearing, Worm---Testing)



S/756/62/000/002/002/004  
A004/A126

AUTHORS: Ponarev, S. F., Kul'bakh, A. A., Dzhonson, V. A., Belousova, T. T.

TITLE: Graphitized materials impregnated with epoxy resin

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metody ispytaniy detaley mashin i priborov. no. 2, 1962, 16 - 28

TEXT: To produce a new antifriction material, the authors carried out tests in impregnating the MP-1 (MG-1) and AP-1500 (AG-1500) graphitized materials with epoxy resin. It was found that this impregnation increased the mechanical strength of both materials by a factor of approximately 2. The compression strength of the impregnated MG-1 material amounts to  $\sigma_c = 1,090 \text{ kg/cm}^2$ , that of the impregnated grade AG-1500 material to  $\sigma_c = 1,540 \text{ kg/cm}^2$ . The impregnation of the MG-1 and AG-1500 materials with epoxy resin reduces their porosity to such an extent that water and various solutions are no longer absorbed. The impregnation of the MG-1 graphitized material considerably improves its antifriction properties. At sliding speeds from 0.3 to 2.8 m/sec and corresponding specific stresses of 75 - 80 and 12 - 15  $\text{kg/cm}^2$  respectively, the impregnated MG-1 material maintains its antifriction properties under dry friction conditions with stainless X-18 (Kh-18)

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Graphitized materials impregnated with epoxy resin

S/756/62/000/002/002/004  
A004/A126

steel. The specific wear under the above working conditions does not exceed 3 mg/cm<sup>2</sup>:hour, while the friction coefficient is 0.3. An impregnation with epoxy resin of the AG-1500 graphitized material does not considerably improve its anti-friction properties. The different impregnation methods applied did not greatly affect the antifriction quality of these materials. There are 10 figures.

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L 39324-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/  
EWP(1) Pr. 4 JD/EM

ACCESSION NR: AP5007682

S/0032/65/031/003/0374/0377

AUTHORS: Kul'bakh, A. A.; Shchavelin, V. M.; Makarychev, B. A.

Device for measuring hardness at high temperatures

Izvestiya laboratoriya, v. 31, no. 3, 1965, 214-217

TOPIC TAGS: material, material strength, hardness tester, heat tolerance

ABSTRACT: A device for measuring hardness of infusible materials in a temperature range from room temperature to 2000-3000°C is described. The device consists of a vacuum chamber mounted upon a table which also holds the control system. The chamber contains a hoist-rotation table 1 for the specimens, a vacuum tube for heating 2, with the loading device 3, the indenter unit 4, with replaceable weights 5 (see Fig. 1 on the Enclosure) and a heater system. The cylindrical core 6 of the indenter is fashioned of stainless steel and is double-jacketed to permit water-cooling. The sides 7 of the chamber also allow water cooling. The vacuum seal is maintained by air plugs 8. Special devices are used for internal loading and test specimen sizes are prescribed in accordance with temperature range. The following comparative description of the given construction: 1) loading weights on the indenter are completely inside the vacuum chamber, thus introducing loads externally are avoided; 2) application and removal

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L 39324-65

ACCESSION NR: AP5007682

of loads are automated and carried out continuously; 3) the time length of load application is given by means of a relay; 4) transmission of the specimen to the testing zone is automated, thus expedient and safe for the testing process. An additional view of the chamber is given in fig. 2 on the enclosure. The authors acknowledge the participation of Yu. G. Podin in the development of the device and N. A. Yevstyukhin in its construction.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskii institut (Moscow Engineering Physics Institute)

SUBMITTED: 00

ENCL: 04

SUB CODE: MT, TD

NO REF SOV: 001

OTHER: 000

Card 2/6

KUL'BAKH, V. [Kulbach, V.]

Calculation of shallow shells of negative curvature resistant  
to tension only. Izv. AN Est. SSR. Ser. fiz.-mat. i tekhn.  
nauk 14 no.3:406-413 '65. (MIRA 18:11)

1. Tallinskiy politekhnicheskii institut.

COMMON ELEMENTS		COMMON VARIABLES MOEL	
<p><i>Handwritten: G</i></p>		<p><i>Handwritten: 2</i></p>	
<p><b>THE ELECTRON METHOD FOR THE CALCULATION OF THE HEAT OF REACTION OF ORGANIC COMPOUNDS.</b> V. O. Kul'takh. <i>Org. Chem. Ind. (U.S.S.R.)</i> 6, 547 (1969); <i>Chem. Zvest.</i> 1969, 1, 2017. The wide applicability of the method of Kharasch (see <i>O. &amp; A.</i> 30, 1957) and earlier papers is pointed out. It can be used for the calcul. of the heat of reaction, heat of formation and heat of decompn. of org. compds. In the equation <math>Q = 26.05 N \cdot \alpha</math>, the quantity <math>\alpha</math>, indicating the energy of formation of the electron shell, was ded. for paraffin hydrocarbons, aromatic hydrocarbons, olefins, acetylenes, carboxylic acids, monohydric compds., phenols, ethers, alcohols and amino compds. The method offers a means of drawing conclusions concerning the correctness of proposed structures by comparison of the exptl. and calcd. heats of combustion. The calcd. heats of combustion of 25 org. halogen compds. are reported in tables. Agreement with the exptl. values is satisfactory. M. G. Moore</p>			
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>RECON STYVIBJIV</p>		<p>RECON BOMIV</p>	
<p>RECON MAP ONV GSE</p>		<p>RECON MAP ONV GSE</p>	
<p>RECON MAP ONV GSE</p>		<p>RECON MAP ONV GSE</p>	

1ST AND 2ND SHEET		PROCEDURES AND PROPERTIES MOST		100 AND 4TH SHEET	
<p>Design of reflux condensers. V. O. Kul'bakh. <i>Khim. Mashinostroyeniye</i> 1940, No. 11-12, 8-10. — The condensing surface of reflux condensers is calc'd. by the Dalton equation is in practice insufficient. It is proposed to base the calcns. on the max. amt. of heat transmitted to the evap. liquid. The equations used, resp., for exothermic and endothermic reactions are <math>H_0 = (Q_r - Q_{ext})/K_0\Delta t_0</math> and <math>H_0 = (Q_{ext} - Q_r - Q_{rad})/K_0\Delta t_0</math> where <math>H_0</math> is the required condensing surface, <math>Q_r</math> is the heat of reaction, <math>Q_{ext}</math> is the heat loss to surroundings by radiation, <math>K_0</math> is coeff. of heat transfer from condensing vapor to cooling water, <math>\Delta t_0</math> is mean temp. difference between condensing vapor and cooling water and <math>Q_{rad} = H_0 K_1 \Delta t_1</math> where <math>H_0</math> is the given heating surface of the app., <math>K_1</math> is the coeff. of heat transfer from the heat carrier to the reaction mixt., and <math>\Delta t_1</math> is the mean difference in temp. between the heat carrier and the reaction mixt.</p> <p style="text-align: right;">B. Z. Kamich</p>					
<p>ADD-514 METALLURGICAL LITERATURE CLASSIFICATION</p>					
FROM SYNDICATE		FROM DOMESTIC		FROM FOREIGN	
140000 02		140000 010 010 000		140000 010 010 000	
140000 02		140000 010 010 000		140000 010 010 000	

USSR/Chemistry - Chemical Equipment May/June 52

"Calculation of Losses of Volatile Substances in Reactions Accompanied by Gas Evolution, and Elimination of These Losses," V.O. Kul'bakh, Lenin-grad Chem-Phar Inst

"Med Prom" No 3, pp 16-19

Shows that losses of valuable volatile reagents carried away by gases forming during organic reactions can be reduced by connecting to the reaction equipment, in addition to the usual cold-water condenser, a reflux condenser through which cooled brine circulates. Mentions as typical reactions

2/16/18  
216718

in which losses can be reduced in this manner: methylation of furfurylamine with methyl iodide, synthesis of dichlorodiphenylmethane by Friedel-Crafts condensation of carbon tetrachloride with benzene, synthesis of p-nitrobenzoyl chloride by reacting p-nitrobenzoic acid with thionyl chloride, synthesis of dimethylbetachloroethyl amine hydrochloride by the interaction of dimethylaminoethanol with thionyl chloride in dichloroethane solution. Refers to thionyl chloride and dichloroethane as being in short supply.

216718

KUL'BAKH, V.



Kul'bakh, V.O.

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26795.

Author : Kul'bakh, V.O. Glagoleva, Ye.V.

Inst :

Title : To The Question of Continuous Dissecciation of  
Excess of Chlorosulfonic and Separation of  
Arylsulfochlorides.

Orig Pub: Med. prom-st' SSSR, 1954, No. 4, 17 - 20;  
Correction: 1955, No. 1, 17.

Abstract: At the production of arylsulfochlorides by the  
action of an excess of  $\text{ClSO}_3\text{H}$  on aromatic hydro-  
carbons it is recommended to treat the reaction  
mixture with 70%-ual  $\text{H}_2\text{SO}_4$ , in which the solu-  
bility of  $\text{HCl}$  (gas) is the least, is produced.  
This will permit to rise the yield of  $\text{HCl}$  (acid)  
as of a byproduct. Next arylsulfochloride is

Card 1/2

KUL'BAKH, V.O.

"Chemistry and technology of chemical pharmaceutical compounds."

M.TS.Robert-Niku. Reviewed by V.O.Kul'bakh. Med.prom. 10 no.2:

47-48 Ap-Je '56.

(MLRA 9:8)

(ROBERT-NIKU, M.TS)

(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

KUL'BAKH, V.O.: RODOV, B.Ya.

Mechanization of sediment removal from filters working under  
pressure. Med.prom. 10 no.3:29-30 J1-S '56. (MLRA 9:11)

1. Leningradskiy khimiko-farmatsevticheskiy zavod "Farmakon."  
(FILTERS AND FILTRATION)

Kul' Bakh, V.O.

KUL' BAKH, V.O.

"Technology and equipment in producing galenicals" by IU.K.Sander.  
Reviewed by V.O.Kul'bakh. Med.prom. 11 no.11:57-58 N '57. (MIRA 11:1)  
(DURG INDUSTRY) (SANDER, IU.K.)

MAYOFIS, Lev Semenovich; KALASHNIKOV, V.P., prof., red.; KUL'BAKH, V.O.,  
red.; RULEVA, M.S., tekhn.red.

[Technology of pharmaceutical chemical preparations] Tekhnologiya  
khimiko-farmatsevticheskikh preparatov. Leningrad, Gos.isd-vo  
med.lit-ry, Leningr.otd-nie, 1958. 537 p. (MIRA 13:4)

1. Glavnyy tekhnolog zavoda "Farmakon" (for Kul'bakh).  
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

KUL'BAKH, V.O.; ZVEREVA, N.A.; POROSHINA, A.N.

New method of producing 1,6-hexamethylene-bis-(dimethylamine).  
Med.prom. 13 no.7:46-49 J1 '59. (MIRA 12:10)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov  
i khimiko-farmatsevticheskiy zavod "Farmakon".  
(DIMETHYLAMINE)

KUL'BAKH, V. O., CAND TECH SCI, "CERTAIN METHODS OF  
*refining*  
~~IMPROVING~~ THE PROCESSES OF FINE CHEMICAL TECHNOLOGY."  
*Robot makes*  
PAPER ON RESEARCH SUBMITTED IN COMPETITION FOR *VA-*  
~~A UNIT-~~  
*degree*  
~~VERSITY~~ DEGREE OF CAND TECH SCI. LENINGRAD, 1961. (MIN  
OF HIGHER AND SEC SPEC ED RSFSR. LENINGRAD ORDER OF LA-  
BOR RED BANNER TECHNOL INST IMENI LENSOVET). (KL-DV,  
11-61, 220).

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ROZENTSVEYG, Pavel Efraimovich; KUL'BAKH, V.O., red.; BUGROVA, T.I.,  
tekhn. red.; LEBEDEVA, G.T., tekhn. red.

[Technology of medicinal forms] Tekhnologiya lekarstvennykh  
form; uchebnik dlia farmatsevticheskikh uchilishch. Izd.3.,  
perer. i dop. Moskva, Medgiz, 1962. 407 p. (MIRA 16:1)  
(PHARMACOLOGY)



BATUNER, L.M.; KUL'BAKH, V.O., red.

[Kinetics of chemical processes taking place in flow  
reactors; a manual for correspondence students] Kine-  
tika khimicheskikh protsessov v protochnykh apparatakh;  
uchebnoe posobie dlia studentov-zaochnikov. Leningrad,  
Leningr. khimiko-farmatsevticheskii in-t, 1963. 94 p.  
(MIRA 18:1)

ACC NR: AP6035878 (A,N) SOURCE CODE: UR/0413/66/000/020/0103/0103

AUTHOR: Kul'bakh, V. O.; Rabinovich, N. A.; Raygorodskaya, V. Ya.

ORG: none

TITLE: Method of obtaining griseofulvin. Class 30, No. 187239

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 103

TOPIC TAGS: griseofulvin, chemical synthesis, chemical compound, drug, ~~drug~~ ~~industry~~ carbon tetrachloride

ABSTRACT: An Author Certificate has been issued for a refinement of the method of producing griseofulvin given in Author Certificate No. 135187. In order to simplify the process, to increase yield, and to improve the quality of the product, the raw material for griseofulvin is washed with a nonflammable, organic solvent, such as carbon tetrachloride, and re-crystallized from methylene chloride. [WA-50]

SUB CODE: 07/ SUBM DATE: 22Mar62

Card 1/1

UDC: 615.45:615.779.932

ACC NR: AP6035878 (A,N) SOURCE CODE: UR/0413/66/000/020/0103/0103  
AUTHOR: Kul'bakh, V. O.; Rabinovich, N. A.; Raygorodskaya, V. Ya.  
ORG: none  
TITLE: Method of obtaining griseofulvin Class 30, No. 187239  
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 103  
TOPIC TAGS: griseofulvin, chemical synthesis, chemical compound, drug,  
~~drug, industry carbon tetrachloride~~  
ABSTRACT: An Author Certificate has been issued for a refinement of the method of producing griseofulvin given in Author Certificate No. 135187. In order to simplify the process, to increase yield, and to improve the quality of the product, the raw material for griseofulvin is washed with a nonflammable, organic solvent, such as carbon tetrachloride, and re-crystallized from methylene chloride. [WA-50]  
SUB CODE: 07/ SUBM DATE: 22Mar62

Card 2/1

UDC1 615.452.615.779.932

KUL'BAKH, V. R.,

"Sliding of Sandy Slopes Due to the Seepage Flow." (Dissertation for Degree of Candidate Technical Sciences) Min Higher Education USSR, Leningrad Polytechnical Inst in enri  
N. I. Kalinin, Leningrad, 1955

SO: M-1036 28 Mar 56

ACCESSION NR: AR4041550

S/0124/64/000/005/V019/V019

SOURCE: Ref. zh. Mekhanika, Abs. 5V132

AUTHOR: Kul'bakh. V. R.

TITLE: Thermal stresses in a thin elastic plate with a heat source on the boundary of the plate

CITED SOURCE: Tr. Tallinsk. politëkhn. in-ta, A, no. 200, 1963, 49-61

TOPIC TAGS: thin plate, thin elastic plate, thermal stress

TRANSLATION: Considers state of strain in a thin elastic rectangular plate, on whose boundary there acts a heat source, and on the lateral surfaces there is heat transfer to the environment. In solving the temperature problem, considers steady-state thermal process in a thin plate, in which it is possible to disregard the gradient of temperature with thickness. It is assumed that the boundary of the plate has a constant temperature. Distribution of temperature is sought in the

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ACCESSION NR: AR4041550

form of a double trigonometric series. The thermoelastic problem is solved for a freely supported plate by a function of stresses  $\varphi$ , which is given in the form  $\varphi = \varphi' + \varphi''$ , where  $\varphi'$  is the solution of a biharmonic equation, and  $\varphi''$  is the solution of Poisson's equation. Analyses resulting solutions and considers an example of determination of thermal stresses.

SUB CODE: AS

ENCL: 00

Card 2/2

BARKANOV, I.V.; GRUSHEVOY, V.G.; DENISOVA, M.B.; KUL'BAKH-GLEBOVA, G.O.;  
POKROVSKIY, S.D.; POLFEROV, D.V.; UNKSOV, V.A.; KHOLMOV, G.V.

In memory of D.F.Mirashov. Geol.rud.mestorozh. no.4:110 J1-Ag  
'61. (MIRA 14:10)  
(Mirashov, Dmitrii Fedorovich, 1889-1961)

STUPKO, A.I.; KUL'BASHNIK, S.N.

Mechanism of crystallization of the cervical mucosa. Akush. i  
gin. no.1:84-87 '62. (MIRA 15:11)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B.  
Anisimov) Stanislavskogo meditsinskogo instituta.  
(UTERUS)



KUL'BASHNYY, G.N.

Operating a pipestill with radiating walls. Nefteper. i neftekhim.  
no.1:47-48 '65. (MIRA 18:6)

1. Batumskiy neftepererabatyvayushchiy zavod.

KULBASOV, M.A.

①  
Mercury in the air of coal mines. M. A. Kulbasov.  
*Gigiena i S. nit.* 1954, No. 2, 31-3. — In the use of Hg in  
minate detonators in coal mines the concn. of Hg vapor in  
the air may rise to over 0.3 mg./cu. m. in selected areas of  
the shaft. It is suggested that other detonators be sub-  
stituted for the Hg-contg. ones, in the interest of industrial  
hygiene. The permitted Hg concn. for industrial areas of  
U.S.S.R. is stated to be under 0.01 mg./cu. m. G. M. K.

10-5-54  
JFK

Sci. Res. Sanitary Inst. in. Evsman.

GUSEVA, I.N.; KUL'BATSKAYA, I.Yu.

"Atlas of the Ukrainian S.S.R. and the Moldavian S.S.R."

Reviewed by I.N. Guseva, I.IU. Kul'batskaia. Izv. AN SSSR.

Ser.geog. no.1:141-144 Ja-F '63.

(MIRA 16:2)

(Ukraine--Maps)

(Moldavia--Maps)

KUL'BATSKIY, A.P., inzh.; FINKEL'MAN, I.B., inzh; SVET, Ye.B., red.;  
PROZOROVA, K.I., tekhn. red.

[Rolling-mill foreman] Master prokatnogo stana; iz opyta raboty  
prokatnogo tsekha Cheliabinskogo metallurgicheskogo zavoda.  
Cheliabinsk, Cheliabinskoe oblastnoe gos. izd-vo, 1952. 47 p.  
(MIRA 14:12)

(Rolling mills) . (Metalworkers)